

## CPG Presentation on Alternative Remedy

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Interim remedy undertaken reasonably quickly for entire 17-miles of river.

Could become final remedy some time down the road, if it works.

Adaptive management approach

RM10.9 is stable, isotopically (didn't use this word, exactly)

There is a line around highly contaminated area, then concentrations drop off.

Proof of concept for rest of river.

Crew season & fish window start June 1

Target areas driving risk

Focus on areas doing most harm, getting them addressed.

Areas not contributing

Cutoffs at 500 or 1000 ppt, target area was still same

Area of 135 acres in 17-miles (extends to 11.5, above that sediments coarse, little contamination)

30 areas

350,000 cy removal? Engineered caps

Background concs are 0.5 ppm

Lot of point to point variability (heterogeneity) – lower 8 miles, not much of a trend, but above there, river transitions to coarse sediment deposits with fine sediment deposits, with different concentrations.

There is structure there that you can take advantage of – areas where you can do good.

All of risk parameters are addressed, except for fish consumption.

For fish consumption, if you slide some of the parameters, get risk down.

Cs data that shows no deposition, above RM14?

Smoothed case – connect target areas initially calculated

Above RM4.5, river narrower, unsound bridges, difficulty opening/closing them

Can't get good sized barge in there

CWCM surveys – no dioxins coming over Dundee Dam, but substantial amounts coming from sediments above RM8.

You can see from data that

Not a lot of dioxins coming from CSOs or anywhere else, except for sediments.

Can't demonstrate that sediments above RM8 are source, but have to be.

When we look at changes, we look at averages. Drops in sediment mirror drops in fish.

Region relying on medians.

Need to sit down with region to agree on how to interpret data.

Agree with Region on sediment transport processes – estuarine dynamics.

May to Thanksgiving is dredging season.

Rowing in spring and fall – June 15 to October 15 to keep rowers happy.

CPG addressing artifacts of model – addressed deficiencies – will have satisfactory, but not completely calibrated model in March (“working model”), final calibrated model in Dec 2013.

CPG says don't understand what happens under high flow event – important to calibration of model.

Only so much a model can tell – never going to really know, until get in there and do work.

Adding food chain model

Production rate below RM4? 2000 cy/day (600 cy/day above RM4)

Hydraulic dredging ruled out due to debris.

Tricky to do debris removal first.

Need for navigational dredging? Not a lot of navigation there.

What would you leave in the river, under cap? Don't have estimates – aren't focused on mass removal.